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UNITED STATES DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics — Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, May 10, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.  
Offices: Federal Office Building, Helena, Montana.

The week ending Tuesday, May 10th, was cool and cloudy with occasional rains, snows, and frosts. The moisture improved soil conditions and benefited crops and ranges generally. Frost damage was mostly negligible, but growth of most crops, ranges, and pastures, was slowed up by daily low temperatures and deficient sunshine. Seeding of small grains and beets neared completion, and planting of potatoes and gardens continued. Summer fallowing operations increased, and there was considerable preparation of ground for corn and beans. A little corn has been planted in the Yellowstone Valley, but general planting of corn will likely be delayed through the eastern districts for another week or ten days. Field work was halted at times by rains and snows.

Winter wheat continued in excellent condition in most sections, and made fairly satisfactory growth despite cool, cloudy weather that retarded spring sown crops. Winter wheat is beginning to joint in Chouteau County. Winter rye has made a heavy growth, and much of the crop will be used for hay. Although weeds are thick in winter wheat fields in Madison and Jefferson Counties, the crop has a heavier stand and is in better condition than for several years. Spring wheat has continued to germinate evenly, and has maintained a satisfactory condition, except in a few spots in Toole County, where a little has rotted from excess moisture and cold. Barley and oats are still being seeded in some localities, with early sown coming up nicely. Beet growth was slow, and lack of top-soil moisture in some southcentral areas necessitated irrigation to start the crop. Alfalfa and hay crops are in satisfactory condition, and in common with ranges and pastures generally need warmth and sunshine for stimulating growth. Rains at the close of the week helped grass lands in southcentral and eastcentral parts of the State, where conditions were becoming too dry. Weather conditions were unfavorable for early fruit bloom.

Ranges are reported in good to excellent condition in the west, and in fair to good condition in the east. Livestock continued to gain, and cows and ewes were reported thriving on ample green feed. Calve and lamb crops continued with good percentages, although weather conditions during the week were hard on lambs and some loss occurred.

Grasshoppers continued dormant, and cold, wet weather temporarily suppressed cricket activity, as well as halted much of the poisoning work.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING MAY 10, 1938

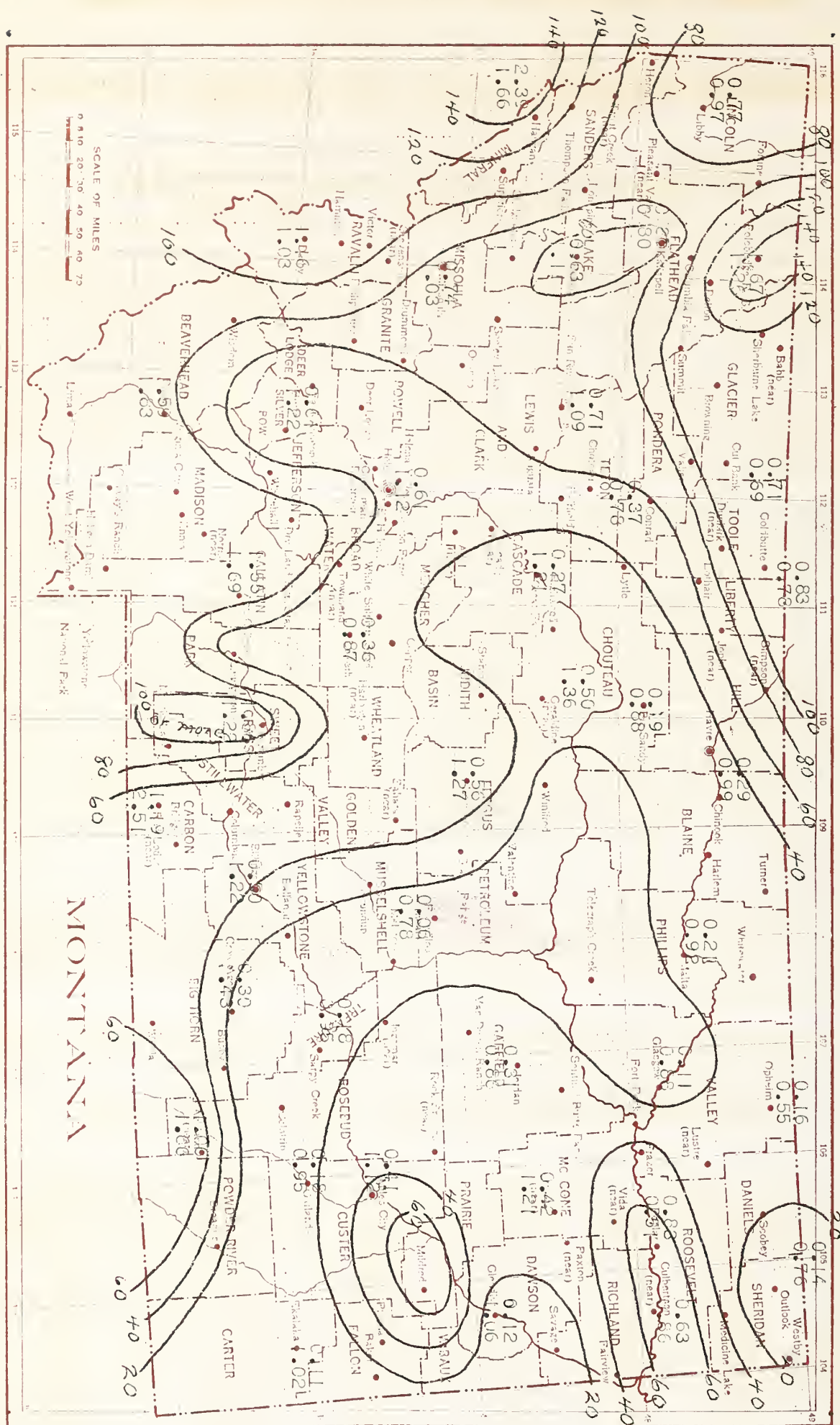
| Station     | Temperature |        | Sunshine<br>% of<br>Possible | This<br>Week | Total Precipitation       |                                     |
|-------------|-------------|--------|------------------------------|--------------|---------------------------|-------------------------------------|
|             | Highest     | Lowest |                              |              | From April<br>1st to Date | For Corresponding<br>Period in 1937 |
| Billings    | 67          | 30     | *                            | 0.28         | 0.99                      | 0.82                                |
| Bozeman     | 57          | 25     | *                            | 0.34         | 2.35#                     | 2.81                                |
| Conrad      | *           | *      | *                            | 0.44         | 1.55                      | 0.40%                               |
| Cut Bank    | 64          | 28     | *                            | 0.42         | 1.83                      | 0.70                                |
| Fort Peck   | 71          | 31     | *                            | 0.03         | 1.00                      | 0.35                                |
| Glendive    | 76          | 26     | *                            | T            | 0.33                      | 0.44                                |
| Great Falls | 59          | 27     | *                            | 0.18         | 0.88                      | 0.22                                |
| Havre       | 66          | 30     | 42                           | 0.39         | 1.13#                     | 0.45                                |
| HELENA      | 58          | 30     | 54                           | 0.46         | 1.69                      | 0.67                                |
| Kalispell   | 62          | 34     | 32                           | 0.56         | 1.16#                     | 1.56                                |
| Lewistown   | 62          | 26     | *                            | 0.86         | 1.52                      | 0.61                                |
| Malta       | 75          | 30     | *                            | 0.20         | 1.11                      | 0.78                                |
| Miles City  | 74          | 30     | 76                           | 0.07         | 1.00#                     | 0.99                                |
| Missoula    | 64          | 34     | 46                           | 0.55         | 1.96                      | 1.19                                |
| Poplar      | 71          | 27     | *                            | 0.06         | 0.80                      | 0.48                                |
| Stanford    | *           | *      | *                            | 0.59         | 1.71                      | 0.25%                               |

# Corrected to agree with April total.

\* No Data.

% Amounts previously stated in this column for this station inadvertently obtained from 1936 record.

W. E. Maughan, Weather Bureau.  
Jay G. Diamond, Bur. of Agri. Economics.



This map shows the percentage of normal precipitation in Montana for April, 1938.

Percentage lines are drawn for each 20 per cent difference.

The upper of each typed pair of figures indicates the actual amount of precipitation that occurred in that respective area during April, 1938; the lower figure of the pair indicates the normal precipitation for the same area and period.

U.S. Weather Bureau,  
Helena, Montana



The following county summaries of crop conditions for the week ending May 7, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: General rain and colder over county first of week. Field work retarded with growing conditions less favorable due to low temperature. Grass good. Range lambing started. Livestock being turned out. Continued reports of good calf crop.

BIG HORN: Precipitation during week has ranged from light to heavy in different parts of county. General growing conditions fair due to cool weather that has prevailed and checked growth somewhat. Light frost reported in some scattered spots. Crop outlook good. Small grain making splendid progress and sugar beet planting about 80% complete. Moisture lacking in much of irrigated areas but germination of beets by irrigation will probably be resorted to, to start the growth. Alfalfa making good progress, corn planting just started. Livestock doing well on range, which is improving daily. Ample labor to take care of labor needs. Crickets have been checked somewhat by cooler weather and snow and rain in some parts of the county.

BLAINE: Approximately 1.70 inches rain. Weather cool with intermittent showers. Moisture conditions excellent. Due to cool weather crops have made very little growth. Seeding somewhat delayed due to heavy rains fore part of week. About 85% of seeding now complete. In most areas last year's summer fallow has been planted with the exception of low spots. Some beets yet to be planted. Range grass making fair growth but in need of warm weather to make more rapid development. Both sheep and cattle being moved to summer range. No improvement in condition of livestock the past week.

CARBON: Weather cool and cloudy with temperatures down to little above freezing for portion of the week. Rains reported in all sections and a light snow fall, particularly in Red Lodge and Luther sections where snowfall was heavier. Plentiful moisture conditions in west side of county, with conditions fairly good in east portion. Both winter and spring grain showing very well. Sugar beet seeding practically completed. Ground prepared for corn and beans in Clarks Fork Valley. Seeding of small grains only partially completed in western half of county. Grass conditions excellent. Apple orchards and plum trees in bloom. Alfalfa and hay crops making good start. Livestock condition good.

CASCADE: Good rains totalling from 0.50 to 0.75 inch throughout county, improved crop conditions wonderfully the past week. Winter wheat in excellent condition and summer fallow well under way. Spring wheat seeding about 75% completed. Seeding of sugar beets about 80% complete, as are other spring crops. Ranges in excellent conditions with prospects for ample grass for all livestock. Ranch lambing getting started with rather disagreeable weather which may cause some loss. Surplus of labor. Cricket poisoning just started but had to stop because of rain. No grasshoppers reported hatching as yet.

CHOUTEAU: Precipitation, 0.47 inch, making excellent growing conditions. Winter wheat excellent, some jointing reported. Spring wheat progressing satisfactorily. Calving well under way. Grass growth helping feed situation. Labor condition unchanged. Cricket control program under way with six county power guns and donated labor on hand guns. Army worm outbreak in area joining Liberty County.

CUSTER - POWDER RIVER: Heavy showers Sunday over most of area followed by three days of rather high wind. Temperatures mostly below 60°. Moisture conditions exceptionally good for this time of year. Seeding of spring grains about completed. Winter grains continue good growth. Considerable acreage of winter rye in for hay. Planting of sugar beets and potatoes continues. Alfalfa and wild hay making good growth after recent rains. Some reseeding of alfalfa taking place. Condition of sheep, cattle and horses remains good. Calf and lamb crops good with plenty of green grass for cows and ewes. North side ranges green and furnishing ample feed. Defensive control of mormon crickets started by individuals this week.

DANIELS: Very severe wind during fore part of week causing some crop damage. Followed by 1.25 inch precipitation which hit all parts of county and in some sections caused considerable erosion and damage to roads. Weather too cold generally for good growing conditions. Seeding of crops about 3/4 completed, but held up due to rains. Wheat up on about half of the land planted. Additional moisture stimulated interest in larger acreages. Livestock and labor situations unchanged.

DAWSON: Heavy rains early in week followed by cool temperatures and heavy frost at close. Seeding going forward on long shifts, with bulk of wheat acreage, running to Government allotment, completed. Many fields showing green with satisfactory stands. Lambing started, with grass fair.

FALLON - CARTER: Precipitation, 0.62 inch, last of week. Weather conditions good. Good crop conditions in greatest portion of Fallon County. South-

eastern corner of Fallon, moisture only fair. Southern Carter, moisture poor. Livestock in good condition. Lambing operations under way. High percentage of lambs crop.

FERGUS: Cold all week, rain and snow during most of week. Wheat practically all seeded. Winter wheat making good root growth, and satisfactory top growth. Grass good. Lamb crop and calf crop above normal. Condition of all stock very satisfactory. Few crickets reported, no grasshoppers yet.

FLATHEAD: Cloudy and wet weather prevailed throughout week. General precipitation throughout county will prove of great benefit to crops. Growing conditions fair, but as soon as weather warms up they should be excellent. Reports indicate some increase in planting of truck crops with slight reduction in potato acreage. Condition of ranges generally improved. All dry lot feeding ceased. Lamb and calf crops very good.

GALLATIN: Week characterized by considerably decreased temperatures. Cloudy, wind and moderately heavy precipitation latter part of week in form of snow. Freezing temperatures one or two nights. Practically all field work stopped because of wet fields. Some early planted spring grain showing good germination in northern part of county. Pastures and alfalfa making somewhat slow growth during cool weather.

GARFIELD - PETROLEUM: Precipitation general in Garfield, ranging from cloudburst portions down to 1.50 inches. Some soil washing resulted in Sand Springs area because of excessive precipitation. Showers light and scattered in Petroleum County with western portion receiving very little precipitation. Generally temperatures have been cool during week, otherwise growing conditions have been desirable. Crop conditions improved considerably in Garfield County, to a smaller degree in Petroleum, due to precipitation. Early seeded spring crops and winter seeded crops continue in good condition with some seeding continuing in Garfield. Rains and cool temperatures experienced during week gave some loss to sheepmen now lambing. Otherwise lambing is getting under way favorably. Improved moisture conditions in a range portion of the area have improved prospects for range livestock grazing. With warmer weather prevailing the grass should make considerable recovery and growth.

GLACIER: Weather conditions cold and blustery with scattered storms throughout week, and cold northwest wind. Growing conditions poor. Seeding still being held up due to storms. Seeding condition as reported before, practically complete in eastern part of county, about 50% complete in Milk River country. Calves and lambs doing well. No trouble reported from either sheepmen or cattlemen. Labor normal.

HILL: Precipitation .76 inch. Weather cool with showers and light snow flurries during most of week. Too cool for good growing conditions. Rains have handicapped seeding to some extent during week. Approximately 90% of wheat is seeded. Grass making slow growth. Livestock in fair to good condition with lambing well under way. No losses have been reported on account of weather conditions. Surplus of labor.

JUDITH BASIN: Slight precipitation, temperatures moderate. General growing conditions good. Winter wheat good. Soil moisture below normal. Soil blowing quite in evidence. Most of spring crop seeded. Livestock mostly on ranges. Feed situation on ranges improving fast. Condition of livestock improving. Calving and lambing well along.

LAKE: General rain over entire county first of week. Entire week cool and cloudy. Some snow flurries. Seeding of crops in east portion of county delayed because of storms. Seeding of all crops practically complete in western part. Grain and pasture crops making excellent growth. Surplus of labor. No crickets control work because of storms.

LEWIS & CLARK - BROADWATER: Good precipitation first of week and scattered showers and light snow all during week. Poor growing conditions because of cool weather. Light frosts that did not do any appreciable damage. Field work slowed up because of unsettled weather. Grain crops standing well. With exception of slow growth, crops are looking excellent. Cool weather favorable to slow melting of snow resulting in maximum use of water for irrigation. Grass improved thru increased moisture. Some stock moving to summer pasture.

MADISON - JEFFERSON: Precipitation 0.73 inch first of week, followed by cold winds and blustery stormy weather. Hard frost Wednesday night. Growing conditions poor because of cold and wind, but moisture conditions best in years. Weeds very thick in fields of winter wheat, but nevertheless wheat continues to look better than it has for several years. Farm work and planting of crops slowed down by moisture, cold weather and wind. Several farmers are irrigating alfalfa and meadows. In vicinity of Twin Bridges some had to irrigate before they could plow, previous to present fall of moisture. Livestock conditions con-



tinued good with grass growing slowly. Many of larger sheepmen have finished or are about to finish lambing operations.

MEACHER: Little showers and snow flurries. Hard freeze three nights, no particular damage. Season well advanced, remaining favorable. Grass particularly good. Lambing continues excellent; 21¢ being asked for several large clips of wool. No sales. Livestock generally in very good condition. Labor unchanged, demand exceeds supply.

MISSOULA: Cool, cloudy and rainy all week. Several good showers. Soil moisture good. Spring weather backward, but no crops damaged by cool weather. Seeding of spring crops 75%-80% completed. Early planted crops germinating. Alfalfa growing slowly. Very small acreage of winter wheat but no damage reported. Sugar beet acreage increased over last year. Pastures and early ranges in good condition. Livestock improving. Labor balanced.

MUSSELSHELL - GOLDEN VALLEY: High winds during first part of week, some rain fell in part of Golden Valley. Trace of moisture in snow and rain on 6th. As yet there has been very little damage to crops because of wind. Spring crops coming up. Winter wheat in good condition. Most spring crops seeded. Some ranchers started summer fallowing. Lambing in full swing, all sheepmen who have been contacted report very good percentage of lambs. Very little loss of lambs. Calf crop good. Grass growing, making plenty of feed. Cattle strong and in good condition.

PARK: Cold and light snows during week. Below freezing nights. Most spring seeding done. Early seeded spring grain up nicely in Yellowstone Valley, and alfalfa up 3 inches and looking fine. Everything about a week later in upper Shields Valley. Winter grain still looking excellent. Coldness checking growth of crops and grass. Practically all cattle and sheep on grass. Calving and lambing 90% completed. In spite of cold spring both crops very good. No bids on wool. Labor apparently balanced. Crickets hatching slowly, grasshoppers still dormant.

PHILIPS: General rain early part of week, 0.69 inches at Malta, heavier to the south. Very light showers in Loring area. Growing conditions generally favorable, although weather still cool. Farming operations general. About 90% wheat seeded. Operations in valley well advanced. No grasshopper outbreaks. Cutworm damage to this year's alfalfa reported in southern part. Conditions good. Ranges improving. Plenty of water. Calf crop normal. Farm Security work projects taking up surplus labor.

PONDERA: Cool weather most of week. Rains totalled approximately 1.00 inch precipitation at Conrad. Early seeded crops up and appear to be very good stands. Seeding was delayed most of week due to wet fields. Nearly all beet growers have finished seeding, but approximately 50% grain acreage yet to be seeded. Some ranch operators have nearly completed lambing and report good results. No reports of wool being contracted to date. Surplus of labor. No grasshoppers hatched to date. However, crickets appearing in small concentrated areas.

PRAIRIE: General showers over county Sunday, 1.25 inch precipitation in Mildred and .75 inch along Yellowstone Valley. Weather quite cool since rain. Majority of wheat up, stooling in the cool weather which prevailed throughout week. Farmers putting in feed crops and getting corn ground in shape for seeding. Grasshoppers hatching in large numbers. Lambing in full swing with report that most lambs are being saved. Labor supply ample.

RICHLAND: Slight precipitation in eastern part of county, considerable heavy showers in west portion. Approximately 1.00 inch moisture has fallen during last ten days. Considerable high wind during part of week with some soil drifting fore part of week. Seeding operations continue throughout county. Seeding of beets started last week, and continued this week whenever weather would permit. Few operators completed seeding of wheat and are now seeding oats and barley. Expected that seeding of corn will start next week. Weather remained cool most of week with slight frosts. Early seeded grain crops up and show good stands. Some winter killing of alfalfa occurred in irrigated valley. Some operators turning livestock out on range where grass is sufficient. Grass growth still rather short but with added moisture and with good growing weather there should be sufficient forage within next week or ten days to handle livestock nicely. No change in labor situation. No grasshoppers reported hatching, as yet, the outbreak is expected.

ROOSEVELT: Generally windy and cool during week. Bad soil blowing the 3rd., stopped by precipitation. Limited amount of damage done to early grain in few fields in eastern part of county. Precipitation varied over county from .4 in southeast section to a reported 2.00 inches in northern parts. Growing conditions poor most of week. Field work stopped fore part of week due to wet fields. Seeding not expected to be completed by many operators until 15th or 30th. Range looks better than for many years with early species showing good growth for sea-

son. Desirable farm labor reported scarce, as WPA continues in full force.

ROSELIE: Heavy rain in some areas first of week. Cold and cloudy most of week. Heavy frost Friday night, little damage reported. Cool weather ideal for range grass and winter grain. Spring grain and beets practically all seeded. Additional acreage may be seeded in some areas because of additional moisture. Corn planting to start first of week. Livestock in excellent condition. Unusually large lamb and calf crops reported.

SHERIDAN: Precipitation 1.50 to 2.00 inches during first of week, to supplement spring moisture supply. Cool weather general during week. Crop conditions continue good. Field work hampered by wet fields. Rains during week caused many farmers to plan on increasing wheat acreage for 1938. Native pasture development disappointing in many parts of county. Apparently much of the native grass has been seriously injured or killed by past years of drought. Livestock condition unchanged. Pasture development in favorable spots appears to be sufficient to amply care for reduced numbers of stock in the county. Labor unchanged.

STILLWATER: Week characterized by cold, blustery weather. Precipitation of 0.20 inch at Columbus. More in south part of county. Too cool for good growing conditions. In general, winter wheat looks good. Some spring seeding still in progress. Seeding of beets practically completed. Cricket control work in progress with good results reported. All livestock in good condition with good lamb and calf crops reported. No activity as yet on wool sales. Surplus of labor.

SWEETGRASS: Weather cloudy and cool. Local showers and snow flurries throughout county. Precipitation .01 inch. General growing conditions slow due to cool weather. Fall grain and spring crops making good growth and appear to be good stands. Range grasses and meadows well advanced considering the season. Livestock in excellent condition, young stuff growing rapidly. Some loss. WPA, seasonal work and insect control using most of available labor. No grasshopper infestation as yet. Crickets slowly hatching to date in three to four various stages, older stages moving somewhat.

TETON: Precipitation during week .77 inch. Rather cloudy and cool all week. Precipitation quite general, with a little more in central portion. With added moisture, winter wheat appears to have recovered from damage caused by severe dust storms two weeks ago. Spring wheat coming up in fine shape. Very little seeding during week due to wet weather. Grass getting good growth on range. Farmers more optimistic since added moisture received. Lambing in full swing with better than normal lamb crop in prospect.

TOOLE: Cold damp weather, from 0.78 to 1.50 inch precipitation. Cool weather slowed up growth and warm growing conditions are needed. Moisture conditions throughout entire county are ideal. Some wheat reported rotting in ground due to low temperatures and excessive moisture. This not very widespread, but few operators are reseeding or intend to reseed some of their earliest down acreage. Past week, not favorable for sheepmen. Several report lambs lost due to cold damp weather. Moisture in sod is much above normal and livestock men are expecting better grass to offset their slight losses. Labor ample.

VALLEY: Cool, cloudy most of week, general rain first of week, 0.58 to 0.99 inches precipitation, with local showers balance of week stopping wind erosion in some areas. Light winds throughout week with severe wind Sunday morning. Grass fair. Salt sage in southern part of county showing up well and black sage some. It appears that buffalo grass has been killed out more than was anticipated. No grasshoppers appearing at this time. Several reports of cutworms appearing worse on idle land. Northern portion of county has about 50% of wheat seeded, and in southern part approximately 30%. Lambing just starting.

WHEATLAND: Cool, cloudy, rain latter part of week, general throughout county, Moisture conditions good. Grass in good shape and much better than at this time a year ago. Winter wheat looks exceptionally good in American Fork area. Crickets hatching in area west of Judith Gap.

WIBAUX: Fair weather first of week, cool last part with frost. Precipitation in nearly all parts of county. Moisture conditions very good. Wheat seed-in, about 90% completed. Total precipitation for April was 1.33 at Wibaux, a great deal more in southern half of county. Grass making good growth. Lambing commenced and a good crop is reported. Livestock in good condition.

YELLOWSTONE: Precipitation 0.36 inch. Cool weather all week. Frost in some parts of county. Snow fell in south part of county and in Billings area. Beet seeding nearly completed. Some corn planting in eastern part of county. Good subsoil moisture but drying out on top. Cold weather has slowed up movement of crickets. Livestock condition good, grass good on range. Surplus of labor.



REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, May 17, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.  
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Cool, cloudy weather continued to retard crop growth the first two days, and strong winds caused considerable soil-blowing and some crop damage in scattered northern and eastern areas on the 12th and 13th. The remainder of the week ending Tuesday, May 17th, was mostly warm and sunny, and generally excellent for the advancement of crops, ranges, and pastures. Good rains occurred at the beginning of the week over the extreme eastern part, and generally throughout the State at the close. Although some south-central and southeastern districts were reporting the need of good rains, the remainder of the State continued with generally ample moisture for present growing needs. The average amount from April 1, to date, is 1.62 inches compared with 0.80 inch for the corresponding period in 1937.

Field work was slowed up by high winds on the 12th and 13th, and halted by rains in the east on the 11th, and over most of the State on the 17th. Muddy fields continued to delay the start of spring work in a few spots in Gallatin, Madison, Jefferson, Tole, and Glacier Counties. Summer fallowing made good progress, except where farmers have been delayed in starting because of slowness in finishing seeding operations. More irrigation water was turned into ditches for germination of beet seed and improving stands of alfalfa hay. Irrigation before seeding has not been necessary this spring in the Sun River and some other projects. Spring planting has been completed in most areas with the exception of feed stuff, potatoes, corn, flax, and gardens.

Earliest winter wheat is jointing. The crop is in excellent condition except on some benchlands, where weedy. Rye has been making rank growth, with earliest in the southeast beginning to head. Spring wheat and other spring-sown grains are in good condition and making satisfactory progress. There has been a little damage to grain in spots from cutworms, and some cricket damage in Powder River and Custer Counties. There has been little evidence of grasshoppers, although recent warm weather has been favorable for hatching. Beets where up are showing well. Early bloom of apples, plums, and cherries has been heavy, with conditions favorable for pollination until slow rains occurred on the 17th.

Ranges and pastures continued to improve. Stands of grass and hay are better than for several years. Some places have been a little slow in starting, but with good moisture conditions, are expected to make good growth with warmer weather. Best conditions in eastern ranges are found in coulees and low places; hilltops are mostly bare or have only thin stands because of soil erosion, drouth, and over-grazing during past years. Fall and spring planted crested wheatgrass is coming up nicely. Grama and other grasses in Fergus County are showing signs of revival, where previously considered dead.

Livestock continued to gain, and were reported in mostly good to excellent condition. Sheepmen have reported best grass conditions for lambing operations than have been known for the last several years. In consequence ewes have an abundant supply of milk, and lambs are mostly in a thriving condition. Lambing is nearing completion, and a start on shearing is awaiting warmer weather.

## TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING MAY 17, 1938

| Station     | Temperature |        | Sunshine      | This Week | Total Precipitation    |                                  |
|-------------|-------------|--------|---------------|-----------|------------------------|----------------------------------|
|             | Highest     | Lowest | % of Possible |           | From April 1st to Date | For Corresponding Period in 1937 |
| Billings    | 72          | 36     | *             | 0.34      | 1.33                   | 0.82                             |
| Bozeman     | 67          | 32     | *             | 0.44      | 2.79                   | 2.81                             |
| Conrad      | *           | *      | *             | 0.70      | 2.25                   | 0.40                             |
| Cut Bank    | 64          | 28     | *             | 0.35      | 2.18                   | 0.70                             |
| Fort Peck   | 71          | 42     | *             | 0.14      | 1.14                   | 0.35                             |
| Glendive    | 76          | 42     | *             | 1.23      | 1.56                   | 0.46                             |
| Great Falls | 68          | 36     | *             | 0.20      | 1.08                   | 0.22                             |
| Havre       | 72          | 36     | 74            | 0.14      | 1.27                   | 0.49                             |
| HELENA      | 69          | 38     | 71            | 0.33      | 2.02                   | 0.67                             |
| Kalispell   | 68          | 36     | 68            | 0.19      | 1.35                   | 1.57                             |
| Lewistown   | 68          | 30     | *             | 0.07      | 1.59                   | 0.61                             |
| Malta       | 74          | 36     | *             | 0.17      | 1.28                   | 0.79                             |
| Miles City  | 70          | 38     | 70            | 0.44      | 1.44                   | 0.99                             |
| Missoula    | 76          | 38     | 68            | 0.05      | 2.01                   | 1.27                             |
| Poplar      | 76          | 34     | *             | 0.11      | 0.91                   | 0.48                             |
| Stanford    | *           | *      | *             | 0.07      | 1.78                   | 0.25                             |
| Average     | -           | -      | -             | 0.31      | 1.62                   | 0.80                             |

The following county summaries of crop conditions for the week ending May 14, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BIG HORN: Somewhat colder during past week. No precipitation. Some sections beginning to suffer from lack of moisture. Small grains doing well but good rain would improve growing conditions greatly. Sugar beet planting about completed. Lack of moisture will require beets to be irrigated up. Livestock in good condition. Hay and range making good growth. Crickets threatening, though checked somewhat by cold weather during past week.

BLAINE: Slight precipitation Thursday night. Growing conditions improved, but still need several warm days. Wheat seeding completed in most cases. Feed crops and potatoes yet to be planted. Sugar beet planting about complete. Early planted beets just coming thru ground. Moisture conditions excellent to start all crops. Livestock in generally in very satisfactory condition. Lambing practically complete with an excellent lamb crop and lambs are doing very well due to excellent milk flow of ewes. Labor situation normal.

CARBON: Heavy rains fore part of week over entire county, with snow in Red Lodge and Luther sections. Very high winds reported latter part of week which caused much soil drifting, even in irrigated sections. Majority of crops seeded. Seeding of corn started in Clarks Fork Valley area. Preparations made for bean planting. Most of small grains planted in western portion of county. Sugar beet stands beginning to show up well. Some winter wheat crops showing frost injury on north slopes. Stands of wheat extra good and making fine growth. Grass conditions good. Livestock in good condition.

CASCADE: Light showers, unusually cool weather, with light frosts and two days of high winds, have characterized the past week. Seeding of spring wheat 90% completed. Winter wheat making good progress, but stands are so thick that good moisture must be had in order to develop the crop. Sugar beets, potatoes and small grains on irrigated land are practically all seeded with excellent stands of beets apparent. Some farmers commencing to irrigate alfalfa hay. Livestock in excellent condition, some having been turned to grass. Range grass best in many years. Surplus of labor. Campaign getting under way for controlling mormon crickets, but favorable dusting conditions have not prevailed. No grasshoppers apparent thus far.

CHOTEAU: Warm weather has speeded crop growth. Light showers early part of week. Severe wind erosion Thursday. Growing conditions bordering Highwood Mountains, excellent. In west areas of county, some winter wheat has blown out and spring wheat reseeded. Livestock situation unchanged. Labor situation unchanged. Mormon cricket control program slow due to cloudy weather. Crews and power dust guns ready to fight when weather permits.

CUSTER - POWDER RIVER: Fore part of week fairly warm. Local showers Tuesday night and Wednesday. Balance of week cooler with some high wind. Growing conditions good. Spring planting of grain about completed. Early plantings now up. Most irrigated crops in. Corn planting starting on both dry and irrigated land. Winter grain continues to look good. Water turned in Tongue and Yellowstone ditch with irrigation of hay and pasture beginning. Grass continues to make good growth although area in southern Custer County and northern Powder River not as far advanced due to recent showers missing that territory. Cattle and sheep continue to gain. Water ample. Crickets rather inactive because of cool weather. Some damage to grain reported.

DANIELS: Trace of precipitation in some parts of county. Growing conditions good fore part of week with weather turning somewhat warmer. Severe winds and much soil blowing the latter part of week caused considerable damage to about one-half of the fields planted. Still an abundance of soil moisture present. Wheat made rapid gains where not damaged by erosion. Livestock situation unchanged. Prairie pastures show good growth in coulees, but are still bare on hill tops where erosion and drouth apparently killed out a large amount of the grass last year. Labor situation unchanged. Insect situation not alarming as yet.

DAWSON: Rains early in week, gave most of county a reasonable supply of moisture. Latter part of week witnessed severe winds with soil blowing in scattered areas. Wheat seeding practically complete with considerable portion of other small grains also in ground. Summer fallow well under way, and corn planting started. Most fields show good stand. Lambing in full swing with reports of heavy crop. Calf crop also satisfactory. Grass conditions good.

FALLON - CARTER: Precipitation .51. Temperature cool. Moisture conditions good in all parts of Fallon County, but only fair progressing southward in Carter. Crop conditions good. Little cutworm damage reported. Lambing operations under way. High percentage of crop. Grass good. Livestock in excellent shape.

FERGUS: Precipitation .79 at Lewistown with .71 coming in one storm. Total precipitation for May, 1.03. Grass Range, Roy and Winifred did not receive more than a third of this amount. Growing conditions for winter wheat good. Where



no soil blowing occurred spring wheat making satisfactory growth. Two days during week there was some damage by blowing to land being prepared for summer fallow and spring wheat seeding. Damage was not general. Livestock making very good gains. Plenty of pasture and water in all sections at present time. Calf crop and Lamb crop both reported generally slightly above normal. Cricket poisoning started in one area with considerable increase in crickets over number in same area last year. More expected to hatch in other areas as soon as warm weather prevails. Grasshoppers hatching.

GALLATIN: Intermittent showers with cool weather first part of week. Clear and increased temperatures latter part of week. Plentiful supply of soil moisture for immediate needs. Some areas still unable to do field work due to muddy fields. Earlier planted spring grain and practically all fall grain showing excellent growth and prospects for a good crop. Pastures and alfalfa have made fair growth, considering cool weather. Dusting for crickets started in north end of county. A few small farm flocks have started shearing.

GARFIELD - PETROLEUM: Precipitation in western Garfield and Petroleum County varying from a trace to .5 inch. Cool and partly cloudy conditions have prevailed. Growing conditions satisfactory because of moisture conditions, warmer weather would improve growth. Small grain seeding practically complete. Corn seeding under way. Slight cutworm damage reported and grasshoppers hatching in northeast Garfield. Lambing nearing completion in several flocks with general high percentage being reported. Very little loss has occurred due to bad weather. Range conditions generally except in East Garfield have improved because of added moisture.

GLACIER: Cold during first of week, warmer latter part, some snow flurries and rain storms generally throughout week. .57 inch precipitation. Pastures and grasses in excellent shape. Grains damaged past few days by drifting soil and high winds Thursday and Friday did severe damage in areas where new crops had shown thru the ground. Hay crops doing well. Seeding in northern and western parts of county still delayed owing to wet weather. Livestock in good shape. No losses reported and no trouble reported with calves or lambs. Labor normal. No crickets or grasshoppers reported.

HILL: Cool and damp with slow growing weather, first of week. Last of week warmed up to some extent. Growing conditions better. .20 inch precipitation. Wheat 95% seeded. Majority of feed crops planted and planting of corn under way. Two days of rather high wind, but not a great deal of soil blowing occurred. Grass making slow growth. Livestock in fair to good condition. Surplus of labor.

JUDITH BASIN: Precipitation and growing conditions good, temperatures moderate. Season advancing rapidly. General condition of crops good. Soil moisture improving. Soil blowing very severe Thursday and Friday. Fall wheat looking fine. Seeding well along with some spring grains coming up. Grasshoppers have not hatched but crickets are mostly hatched with severe infestation in northwestern portion of county, and southwest portion. Livestock all on range. Grass looking better than it has for years. Calving and lambing practically finished. Labor fairly well balanced.

LAKE: Cool, cloudy, scattered showers over entire county all week. Spring weather backward, but no crops damaged by cool weather. Some high winds last of week. Practically all seeding completed. Beets coming up. Summer fall wing in full swing. Hay and pasture crops making excellent growth. Cherries in bloom on east shore. Apple flower buds getting pink. Livestock in good condition. Sheepmen ready to start shearing as soon as weather gets warmer. Cool weather has slowed up movement of crickets and grasshoppers.

MADISON - JEFFERSON: Good rains fell during first four days of week, improving the already good moisture conditions. Windy last three days of week, but fairly warm and growing conditions favorable. Recent rains and cold weather have delayed farming operations and many farmers are anxious to get their crop planted. Few were fortunate in getting planting done before rains started. The two days of warm weather have caused grass to develop rapidly, leaves to show on trees, and grain has started to grow. Sugar beets and peas are being planted. Conditions continued good, with most of the sheep and cattle having been placed on spring range.

MEAGHER: Light rains and snow first half of week. Hard wind Thursday night and Friday resulted in drying. Moisture conditions still very favorable. Smith River reservoir approximately 58% filled as compared with 40% in 1937. Cold weather held back growth somewhat. Indications still remain favorable for both grass and small grains. Spring seeding operations about completed. Considerable spring grain already up. Many operators have finished lambing, very little loss reported as a result of recent cold and storm, percentage high. Ewes have lots of milk. Cattle turned out on lower summer ranges. A few wool clips sold for 20¢. Labor supply a little ahead of demand due to influx of transient labor to Musselshell projects. Grasshoppers beginning to hatch, crickets already hatched in lower areas.



MISSOULA: Cool and cloudy first of week. Warm and bright last of week. Two good rains first of week. Excellent growing conditions. All crops starting to grow well. Apple trees budding. Cherries blossoming. Spring grain coming up and growing well. Seeding still in progress, probably 80% completed. Seeding retarded by cold rainy weather. Soil moisture conditions good in most localities. Outlook good for all crops. Pastures and ranges in good condition. Livestock improving. Labor balanced.

MUSSELSHELL - GOLDEN VALLEY: Light local showers. Quite cool and windy. Past week witnessed winds that damaged crops, for first time this spring. Damage was not very great. Spring seeding is practically completed, about half of corn is seeded. Livestock in good condition generally. Very good lamb and calf crop. Abundance of grass on range is helping all livestock.

PARK: Light rains and cold first of week, warmer latter part. Most spring seeding completed. Summer fallowing under way. Winter and early seeded spring grain looking good. Grass has been retarded by late spring, but starting good now. Livestock in good condition. Cricket dusting to start next week. Few hoppers hatching.

PHILLIPS: Frequent showers all over county. About .26 inch at Malta, with heavier precipitation to south. Continued cool weather makes all growth slow, but moisture conditions ideal. No wind damage. Farming operations delayed on account of rain, but bulk of dry land grain seeded. Practically all sugar beets planted. Indications point to increased wheat and sugar beet acreages. Enough rain to bring crops up. No grasshopper outbreaks. Some cutworm damage in spots. Condition of livestock good. Calving normal. Lambing under way with normal crop in prospect. Range improving slowly. Surplus of labor.

PONDERA: Weather cool most of week. High winds Thursday and Friday did damage to some fields. Crops that are up have good stands. Seeding delayed on many places due to rains and wind. If favorable conditions continue, most of seeding should be completed within a week. Many fields of crested wheatgrass seeded last fall are coming in good shape. Grass is progressing in fine shape and spring pasture is much better than a year ago. Lambing completed on some ranches and operators plan to move to summer range before long. Labor supply adequate. No grasshoppers reported hatched to date. Cutworms reported in small areas.

PRAIRIE: Approximately .50 inch precipitation fore part of week. Weather cool, cloudy, and windy latter part. Crop conditions favorable for wheat, but rather cool for gardens and corn. Moisture supply favorable at present time. Livestock continue to improve. Good prospects for lamb crop are reported. Labor ample.

RICHLAND: No precipitation. Rather strong winds caused some soil blowing first and last of week. Early seeded grain crops coming along in good shape. Many growers have completed seeding of wheat and are seeding other small grains. Some acreage of flax being seeded. Seeding of corn started. Probably 60% to 70% of beet acreage is seeded and it is expected that all growers will have completed seeding operations next week. Ranges greening up and livestock beginning to pick up. Quite a number of losses in calf crop reported from some growers. Lambing under way. No change in labor situation. No grasshoppers hatched to date, no report yet of cutworms. A number of wireworms observed in Sidney area.

ROOSEVELT: Generally warm and clear. Light precipitation on 8th. Growing conditions good most of week. Strong wind 13th caused soil blowing. Majority of seeded fields not blowing, though some damage expected to spring grain in some localities. Wheat making good growth. Seeding of grain practically completed with the exception of northern communities where seeding is about 75% completed. No grasshoppers reported hatching. Hatch expected to be light. Range improving with warmer weather.

ROSEBUD: Few light local showers during week. Weather cool entire week. Some wind but no soil drifting of any consequence. Winter wheat and grass beginning to suffer from lack of moisture in central and southern part of county. Rains during past two weeks have missed this portion of county. Some grain fields becoming weedy as weather conditions remain unfavorable for growth of crops. Feed and water conditions in range country north of river best in years. Lambing about 75% completed with unusually heavy percentages reported.

SHERIDAN: Moderate to cool temperatures predominated throughout week. Local showers have occurred at various points in county. On 13th, strong winds caused severe dust storm throughout county. Growing conditions satisfactory for cereal crops. Most of wheat fields beginning to look green. Dust storm on 13th injured many fields which had been developing nicely. Continued wind will cause great damage to crops in county. No change in livestock conditions. Pastures developing very slowly, partially due to cool weather, but the more important cause for this is the drouth and over-grazing during the past few years. No change in labor situation.



SANDERS: Slight precipitation. Growing conditions very backward on account of cold, cloudy weather. Last of week bright and warm. All crop conditions very good with present ample moisture supply. Winter wheat making good growth. Spring grains coming up nicely. Alfalfa and clover seeding above normal under ideal soil and moisture conditions. All fruit trees coming into heavy blossom. Livestock making good gains. Range very backward on account of cold weather but sufficient for good carrying capacity. Small labor surplus. Streams rising gradually from melting snows but still at fairly low stage for this period.

STILLWATER: Cool and rather windy during entire week. .10 precipitation at Columbus. Several good showers reported in other parts of county. Temperatures not high enough for ideal growing. High winds latter part of week conducive to considerable soil moisture evaporation. In general, all crops look good. Seeding of spring grain crops still under way. Water being turned in several ditches for irrigating. Cricket control continuing with good results. Livestock of all kinds in good shape. Lambing practically completed. No activity in contracting wool as yet. Surplus of labor.

SUN RIVER PROJECT: This week has been one of fair growing weather with two days of high wind. With Monday's storm there has been 1.50 inches of moisture since April 25th. Very few farmers are irrigating before seeding. Seeding going on very rapidly. Sufficient moisture for good germination of small seeds.

SWEETGRASS: Continued cool and cloudy the past week. Precipitation 0.08. Although cool, fall grains, alfalfa and grass are growing rapidly. Spring grain and alfalfa are coming up with promise of good stands. Sheep and cattle growing rapidly on grazing. Reports of sheep loss from poison weeds and bacterial infections. Some lamb losses from white muscle disease. No reported losses in calves. 90% of labor employed in various activities. Crickets hatching and growing slowly due to cool weather. Control work 75% under way. Very little evidence of grasshoppers as yet.

TETON: Precipitation to date for May at Choteau, 1.58 inches. Power community and surrounding territory, which was hit worst with drouth, reported 1.70 inches for May which is most of any place in county. Two very bad blowing days middle of week. Last of week, conditions were ideal for growing conditions. Seeding about 75% done. Wet weather somewhat unfavorable for lambing.

TOOLE: Two good rains throughout county, precipitation for May considerably over normal up to present time. High winds prevailed for two days with little if any damage, due to moist condition of the ground. Weather warmed up considerably, with good growing weather. Little seeding has been done, due to wet fields in most of county. Practically no summer fallow has been worked, as farmers are hard pressed to get their crops in. About 80% of crops have been seeded and it is expected bulk of crops will be in in next few days if present weather conditions hold out. Sheep operators report better percentage of lamb crop than in former years. Grass making very rapid growth and there is sufficient moisture to insure very good start. Labor supply ample.

VALLEY: Fore part of week characterized by cloudy weather, latter part bright and warm, with calm to moderate wind. Growing conditions fair; local showers throughout county 7th and 8th with some snow. About half of sugar beets seeded; about 80% of wheat seeding completed. Summer fallow started in many cases. Lambing well under way. Reports so far indicate good lamb crop. Sheepmen claim grass is better at this time and is the best grass for lambing that they have had for years. No labor needed. No grasshoppers appearing at this time. Few reports of cutworms, particularly on ground that has been idle three to five years. One report of pale western cutworms.

WHEATLAND: Entire week cold, high winds latter part. Some moisture fore part of week. Seeding of crops about completed. Grass fair.

WIBAUX: Precipitation at Wibaux, .25 inch. Reports from southern part of county, .43 to .95. Moisture conditions very good with not less than two feet of moisture on the range land except in northern part of county where additional moisture will soon be needed. Practically all of the wheat has been seeded, also most of oats and barley. A few have reported that they are thru with corn planting. Good stands of crested wheatgrass from last fall's seeding as well as from some of this spring's plantings are being reported. No hatching of grasshoppers reported. Ranges improving fast with stand of grass remarkable considering conditions the last several years.

YELLOWSTONE: Precipitation .18. Weather cool with near frost every night. Growing conditions slowed up considerably due to cool weather. Practically all spring seeding completed with exception of some beans. Most corn seeded. Spring grains and beets up and good stands. In some cases it has been necessary to irrigate beets up. About normal acreage of beets seeded. Winter wheat still doing fine, but need moisture. Livestock conditions good, with plenty of grass and water. Surplus of labor. Cricket control slow due to cool weather.

(Continued on Page 5.)

BEAVERHEAD: Several rains during week over county in general. Temperature warmer last few days. Most of week, temperature down. Growing conditions slow because of cool temperatures and lack of sunshine. Rains hindered field work. Lambing in full swing. Livestock in good shape and turned out on range.

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Helena, Montana,  
May 17, 1938.



REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, May 24, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.  
Offices: Federal Office Building, Helena, Montana.

Moderate to heavy rains over a two to four-day period during the week ending Tuesday, May 24th, furnished the best surface and subsoil moisture conditions the State has known for the last several years. From 2 to 5 inches of rainfall occurred over most southern districts as well as over those lying immediately east of the Continental Divide. Amounts scaled down to around  $\frac{3}{4}$  of an inch in the extreme northeast, and to  $\frac{1}{2}$  inch, or somewhat less, in the Havre, Missoula, and Kalispell areas. Snow varying in depth from one to four feet occurred in the higher mountains. The snow melted and the rain fell in a manner to permit maximum absorption by soils. The outlook for a good supply of irrigation water was decidedly improved by the week's precipitation.

Late planting and summer-fallowing were halted generally by rains at the beginning of the week, but were resumed in most northern and western districts by the middle of the period. Some planting of feed crops, flax, potatoes, corn, and alfalfa remains to be done, and now that moisture conditions are satisfactory, will be rushed to completion as soon as farmers can get into their fields. Some reseeding of wind-damaged grain fields has been necessary in the extreme northeast.

The cold weather and lack of sunshine during the rainy half of the week was of less deterrence to the growth of winter wheat and grass than to spring grains, sugar beets, and gardens. The last half of the week was quite favorable for crop growth, but continued warmth and sunshine is now mostly needed for stimulating plant development and furnishing ideal growing conditions. The winter wheat crop is regarded as mostly assured as a result of the week's rains, and should reach maturity unless affected by hail or insect damage. It is reported jointing and heavily stooled, and from 12 to 16 inches high in Big Horn County. In Gallatin Valley, winter wheat was badly flattened by heavy snows, but is expected to recover. Spring wheat has germinated in fine shape, and shows good stands generally. Early sugar beets have reached the thinning stage with fine stands, and heavy rains have made irrigation largely unnecessary for germination of late-sown fields. Local frosts on the 20th and 21st slightly damaged oats and gardens. Heavy snows and cold wet weather caused unfavorable conditions for pollination of fruit trees in the Bitter Root Valley and other fruit areas where trees had come into bloom.

Livestock were reported finding plenty of feed and water, and in a very satisfactory condition. Unseasonably late and heavy snows made some feeding necessary in the high mountain areas, and cold, wet weather caused some loss of lambs. Movement of livestock to summer range in the higher mountain districts was halted by the storm, or deferred because of the backward growth of grass. On the lower levels, grass is well ahead of last year, and showing a better stand than for some years. Moisture conditions are reported unusually favorable for sowing of alfalfa and crested wheat grass. Shearing is in full swing in parts of the Flathead Valley, but has been delayed by unfavorable weather in other sections.

Although the grasshopper threat has been negligible to date, crickets have appeared more numerous and have reached the travelling stage. Cold, wet weather held the crickets in check fairly well until the 21st, when increased activity necessitated resumption of dusting work and other control measures.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING MAY 24, 1938

| Station     | Temperature |        | Sunshine<br>% of<br>Possible | This<br>Week | Total Precipitation       |                                     |
|-------------|-------------|--------|------------------------------|--------------|---------------------------|-------------------------------------|
|             | Highest     | Lowest |                              |              | From April<br>1st to date | For Corresponding<br>Period in 1937 |
| Billings    | 72          | 33     | *                            | 3.26         | 4.59                      | 1.14                                |
| Bozeman     | 69          | 28     | *                            | 2.72         | 5.51                      | 3.18                                |
| Conrad      | *           | *      | *                            | 1.67         | 3.92                      | 0.50                                |
| Cut Bank    | 73          | 29     | *                            | 3.06         | 5.24                      | 0.85                                |
| Fort Peck   | 73          | 42     | *                            | 0.45         | 1.59                      | 0.36                                |
| Glendive    | 75          | 41     | *                            | 0.46         | 2.02                      | 0.46                                |
| Great Falls | 74          | 38     | *                            | 0.62         | 1.70                      | 0.23                                |
| Havre       | 76          | 34     | 40                           | 0.46         | 1.73                      | 0.64                                |
| HELENA      | 71          | 33     | 38                           | 2.03         | 4.05                      | 0.79                                |
| Kalispell   | 72          | 36     | 52                           | 0.15         | 1.50                      | 1.91                                |
| Lewistown   | 72          | 30     | *                            | 1.36         | 2.95                      | 0.93                                |
| Malta       | 74          | 36     | *                            | 1.04         | 2.32                      | 1.00                                |
| Miles City  | 74          | 40     | 40                           | 1.35         | 2.79                      | 1.33                                |
| Missoula    | 76          | 36     | 54                           | 0.54         | 2.55                      | 1.56                                |
| Poplar      | 71          | 40     | *                            | 0.69         | 1.60                      | 0.48                                |
| Stanford    | *           | *      | *                            | 2.75         | 4.53                      | 0.26                                |
| Average     |             |        |                              | 1.41         | 3.04                      | 0.98                                |

\* No Data.





The following county summaries of crop conditions for the week ending May 21, 1958 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

**BEAVERHEAD:** Heavy rain and snowfall over county past three days. Temperatures cold. Growing conditions slow due to temperatures. Will probably be some lamb loss due to storm. Grass fair.

**BIG HORN:** 2.5 rainfall during week makes growing conditions ideal. Best rain in many years makes crop conditions the best since 1927. Winter wheat above normal from a foot to sixteen inches high, heavily stooled. Beets making uniform germination and good stand. Thinning of beets will be under way next week. Livestock in excellent condition and range above normal with grass heading out. Water holes full and moisture penetrated in soil deeper than normal. Labor ample. Mormon crickets threatening in places.

**BLAINE:** Cool weather with intermittent showers throughout entire week. Moisture conditions excellent but weather too cold for good growing conditions. Planting of late feed crops has been somewhat delayed due to weather conditions past week. In many areas early planted crops are up and showing fairly good growth. Sugar beets retarded due to cold weather. No serious infestation of grasshoppers, however, mormon crickets have appeared in spotted areas in southeast part of county.

**CARBON:** Heavy storms throughout county with heavy snowfall in Red Lodge and Luther sections, with light snowfall in other portions, accompanied by rain. Temperatures in Joliet area range from maximum of 75° to minimum of 32°, with precipitation of 3.8 inches reported in 4 days, heavier precipitation reported in upper portion of county. Weather mostly cool and cloudy. Winter wheat doing exceptionally well. All crops planted making good progress, with some grain crops yet to be put in, in western portion of county. Livestock in good condition. Crickets travelling but cool wet weather has prevented damage. Some crickets reported to be in stage of one-third grown.

**CASCADE:** Rain totalling 1.97 inches fell during week. Weather cloudy and cool and no crop damage resulted from any cause. Rains thus far in May assure a good winter wheat crop and only hail or insect damage can keep this crop from maturity. Summer fallow is well under way on dryland and seeding of dryland crops is about 90% completed. Still some seeding to be done on irrigated lands, especially of potatoes and small grains. Sugar beets about 95% seeded. Recent rains and snow have increased available runoff for irrigation sufficient to insure ample water for this purpose. Crop prospects best in a decade. Livestock in excellent condition with ample feed supplies in sight. Insects held at a stand-still because of cold weather. Grasshoppers, and cutworms have done no apparent damage, to date.

**CUSTER - POWDER RIVER:** Week began warm but turned cool and cloudy with four days of local showers. General all night rain Thursday, also good rains in south and western parts of Custer County. Growing conditions of all crops much improved by showers. No necessity of irrigating up sugar beets. Alfalfa and other hay crops making fine growth. Newly planted alfalfa making good start. Seeding operations practically completed except for corn and late forages. Irrigation out of Tongue River started with water supply ample. Sheep and cattle gaining. High percentage of both lamb and calf crops reported. Grass exceptionally good with plenty of old feed except on North side. Range conditions in south area, previously reported dry, now much improved.

**DANIELS:** Severe winds from the east caused some erosion fore part of week, but was followed by approximately .6 inches precipitation over a 48-hour period. Growing conditions were poor fore part of week because of cold and cloudy weather. Latter part of week becoming clear and warmer. Some fields seriously damaged by severe winds, and in some cases fields blown completely out are being reseeded. Livestock and labor situations unchanged.

**DAWSON:** .77 inch precipitation received in three-day rain, which greatly improved growing conditions. Crops generally coming along nicely after the rain, with wheat seeding about completed. Some delay in seeding was caused by rain, but work going along satisfactorily. Lambing progressing with satisfactory results. Grass conditions will be improved materially.

**FALLON - CARTER:** 2.16 inches precipitation. Showers covered all of Fallon and Carter Counties. Growing conditions excellent. Crop Conditions good. Reports are that rains have caused very little loss of lambs. Livestock conditions good.

**FERGUS:** 1.2 inches precipitation at Lewistown. Considerably more in other parts of county. Precipitation was slow enough so there was no runoff except on very steep land. On steep land and coulees there was enough to fill coulees. With precipitation this week conditions of winter and spring grains most ideal. Winter wheat showing very rapid growth. Spring wheat almost all up and making very satisfactory progress. Grass has very fine growth and is best in five years. Livestock with plenty of grass and water are in satisfactory condition. Lambs and calves developing rapidly. Crickets showed up in another community this week. Second crew expected to start first of week. Grasshoppers reported in some communities.

(Continued on Page 2.)



FLATHEAD: General rain throughout county fore part of week, latter part sunshiny and warm. Growing conditions excellent. Moisture conditions good. Frosts at night, but have done no particular damage to small grains and forage crops. Practically no damage to crops from soil blowing. Seeding operations nearly completed, with most spring sown grains up in good shape. Few reports of damage from western wheat maggot and wireworms. Range conditions good. Condition of all classes of livestock excellent. No report of any spring loss.

GALLATIN: Entire week cool and cloudy with intermittent showers within fore part of week, and heavy snowstorm of nearly 3 inches precipitation during latter part of week. Heavy snow has flattened winter grain badly, although it is felt that this will recover. Absorption of heavy amount of precipitation is good since practically no runoff has occurred from melting snow. All field work stopped. Seeding still to be done insouthern portion of county. North portion nearly all seeded and summer fallowing started in some areas.

GARFIELD - PETROLEUM: Precipitation approximately .5, quite general over entire area. Growing conditions fair to good, moisture being ample, temperatures somewhat low. Some cutworm damage being reported in various areas to alfalfa, old and new seedings, and small grain. Corn seeding continued rather slowly because of weather conditions. Condition of cattle improving with gradual improved condition of ranges generally. Lambing had progressed very well, however, cool wet weather this weekend may result in some losses. Available labor generally absorbed by agriculture and WPA.

GLACIER: 2.5 inches precipitation. Killing frost reported in middle of week. Otherwise general growing conditions fair in eastern part of county. Heavy snowfall in Glacier Park and snow in extreme eastern part of county. Soil moisture excellent. Crops conditions generally good. Some seeding yet remains and the rain of this week has delayed completion of seeding. Extreme northern part of county about 80% seeded. Pasture, grass and hay crops looking excellent. New stands of crested wheatgrass extremely good. Lots of sheep now coming into the county and several trainloads of sheared sheep came in this past week, during the snow and rain storms. General livestock situation good. Considerable land being broken on reservation, and a number of 40's under the irrigation project being broken up.

HILL: .46 inch precipitation extending over nearly 24-hour period, early part of week, has improved growing conditions to considerable extent. Warm, sunshiny weather latter part of week has made for ideal growing conditions. Spring crops coming up in very even condition. Winter wheat has stood to a considerable extent and shows good growth. Cool, damp weather has retarded grasshopper and cricket menace. Grass growing very rapidly. Livestock in good condition. Surplus of labor.

JUDITH BASIN: Over 1.5 inch precipitation latter part of week. Growing conditions improving, temperatures moderate. Soil moisture improved. Wheat doing fine. Most of wheat is now planted. Soil blowing very severe on certain fields during early part of week. Heavy snow in foothills has given crickets a setback. Hoppers have not hatched to any great extent. All livestock on range and doing fine.

LAKE: General showers over entire county middle of week. Cold high winds latter part of week. All crops growing rapidly. Soil moisture conditic good. Some farmers starting to irrigate alfalfa and pastures. Shearing of sheep in full swing. Ranges excellent. Surplus of labor. Some outbreaks of grasshoppers. Cricket migrations checked by cool weather.

MADISON - JEFFERSON: Very heavy rains and snows middle of week brought total of 2.94 inches precipitation. Last of week fair and warm with excellent growing conditions. Most of moisture went into the ground, greatly improving soil moisture which was beginning to run low in many places because of high winds. Crop conditions improved greatly with the rains, although many farmers are still seeding grain around Harrison and Ennis. A larger than normal acreage of sugar beets has been planted around Whitehall and in the South Boulder area. Some of the Whitehall beets will be ready to thin in a few days. Livestock conditions exceptionally good, with recent moisture greatly improving range conditions. Snow and rain did a little damage in the few lambing camps that are still operating.

LEWIS & CLARK - BROADWATER: Too cool for growing, but value of precipitation was the best experienced for approximately ten years. Ideal season for starting new seedings of grasses and legumes. All crops germinating splendidly. Summer fallow will have more of a weed problem to control which will be more than offset by the increased precipitation. Minor lamb losses due to heavy rain. Some stockmen in higher mountain areas resorted to feeding for a few days due to heavy snowfall.

MEAGHER: Heavy storm lasting three days, rain and snow, no wind, not very cold. Heavy snow covering remaining in mountains. Runoff moderate. Soil



conditions, crop conditions and growing conditions now excellent. Growth of grass far ahead of last year. Losses from storm not yet reported, expect some lamb loss. Lambing very nearly completed. Labor supply ahead of demand. Hatching of insects retarded by cold weather.

MISSOULA: Cool and cloudy most of week. Good rains middle of week. All crops growing satisfactorily. Spring seedings germinating very well. About 90% of spring planting completed. Some sugar beets, potatoes and grain yet to be planted. Some early beets being cultivated. Prospects good for stands of soil conserving crops planted this spring. Both cherries and apples in full blossom. Large number of blossoms but weather not very favorable for pollination. All ranges and pastures in excellent condition. Livestock improving. Labor balanced.

MUSSELSHELL - GOLDEN VALLEY: 3.3 inches rainfall, covering both counties. A foot of snow fell in Golden Valley County south of the Musselshell River and extending east to Cushman. Crop conditions very good. Winter wheat crop just about assured. Spring wheat coming up in good shape. All other seeding just about completed. Livestock in good condition. Lambing and calving just about completed.

PARK: Cold weather with rain and snow, 3 inches precipitation. Heavy rains and snows welcomed as most spring seeding completed. Coldness retarded growth but moisture will insure grass and will carry grains to mid-summer. Crop prospects excellent. Little frost damage to gardens feared. Livestock in good shape. Deep snow hindering feeding in higher ranges. Few wool buyers making contacts. Quite a few men seeking jobs. Coldness retarded cricket and hopper infestations.

PHILLIPS: 1.0 inch rain recorded at Malta, lighter south portion, about same in north. Cool fore part of week, warmer last part. Growing conditions improving. Most dry land crops planted. Wet weather has retarded operations in Valley. Crops slow on account of cool weather. General crop conditions satisfactory. No grasshopper outbreaks. Livestock condition good. Ranges improving. Stock water plentiful. Calf and lamb crop normal for season. Surplus of labor.

PONDERA: Good steady rains during middle of week, total precipitation 2.02 at Conrad with some variation above and below this figure in other parts of county. Very little growing weather due to cool temperature. Nearly all of beets seeded. However, some early stands may need to be reseeded due to volunteer grains and wild oats. Field work delayed due to wet condition of fields, few operators still seeding grain. Grass conditions much above that of past years and prospects are likely for best range condition in several years. Some movement of livestock to summer grazing areas. All livestock in good condition. Labor supply adequate; expected that considerable local labor will be used in beet fields this season. Grasshoppers beginning to hatch, and with warmer weather considerable hatching should take place within next few days.

PRAIRIE: Weather conditions have been favorable with drizzling rains totaling about one inch of precipitation. Rains cold and there was no runoff. Crop conditions are very favorable at present time with ample moisture and crops looking good. Range grasses making good growth. Livestock continues to improve. Good lamb crops reported. Ample labor supply.

RICHLAND: .97 inch precipitation during middle of week, greatly improved moisture conditions. This moisture fell just in time to aid beet growers in getting their beets into the ground as the winds of the previous week tended to dry the surface soil. Crops in general are looking fine and prospects for a crop at present time are best they have been for ten years. Growers now planning on putting in quite a little acreage of feed crops, particularly corn, millet, cane and sudan grass. Some acreage of beets yet to be planted. Anticipated that at least 95% of all wheat has been planted but there will still be some of the small grains such as barley and oats to be planted. Ranges have continued to improve and livestock are beginning to show improvement. No signs yet of grasshopper hatching.

ROOSEVELT: General precipitation over county. Windy and cloudy with lower temperatures most of week. Too cold for good growing conditions, but moisture conditions excellent. Seeding of grains practically completed with seeding of corn started, before fields became too wet to work. With exception of scattered spots damaged by blowing, wheat is in good shape. Cutworms reported to be doing some damage to grain in few fields. Some hoppers hatching before recent storm. Livestock improving in condition as ranges improve. Later species of grass beginning to develop.

ROSEBUD: Over 3 inches rain in four days, very nominal runoff. Reported to be best rain in 20 years. Moisture received just in time to save some winter wheat and rye which had been suffering. Practically all small grain and beets seeded before the rain. Increased seeding of late feed crops expected because of excellent moisture conditions. Lambing practically completed. Some losses may have occurred in gumbo country.



SANDERS: .41 inch precipitation. Maximum temperature 69°, minimum 37°. Warm weather with rain over most of county advanced crop growth. Good moisture conditions for present growing needs. All crops backward account cool weather. Spring seeding completed in most sections. Early seeding showing green under ideal conditions. Very little irrigation necessary to date. Winter wheat and meadows in good condition but making slow growth. Livestock doing well. Range in good condition but retarded from cool weather.

SHERIDAN: About 1.5 inches precipitation on 17th and 18th. Crop conditions continue to be excellent. Little damage from winds is apparent. Several days of quiet growing weather is necessary in order that crops will protect soil from blowing. Livestock conditions continue to improve.

STILLWATER: Cool cloudy weather during week with exception of 21st which was clear and warm. Starting on 17th, total of 3.09 inches precipitation recorded at Columbus, this general over county in form of rain or snow or both. This moisture should put all crops and grass in excellent condition. Very little runoff. Moisture was boon to sugar beet growers who were making preparations to irrigate beets up. There is still some spring seeding to be done. All livestock in good condition. Lambing season is practically completed. Surplus of labor.

SUN RIVER PROJECT: Three day rain, precipitation 2.17 inches. Sufficient moisture available for all crops to start in good shape. Sugar beets 85% seeded. Seeding will be finished very rapidly first part of week. Livestock going on to grass. Sufficient moisture for grass to grow. Adequate labor supply. Material change of wheat seeding to flax, mustard, peas and sugar beets.

SWEETGRASS: Half of week partically cloudy and cool. Balance cool, ran and snow. Precipitation 3.7 inches. General growing conditions slow. Crops of all kinds germinating and starting fine, with warmer weather will make excellent growth. Livestock growing and gaining daily. Lambing and calving almost complete and a very satisfactory increase. Some loss in both cattle and sheep on poison weeds. Labor quite generally taken care of by seasonal work---Insect control and WPA. Very little evidence of grasshoppers. Cricket growth slow.

TETON: 2.97 inches precipitation at Choteau, from drizzling rain 17th to 19th, little less in eastern portion. Two feet of wet snow in foothills. Irrigation water now plentiful. Water now going into big Bynum reservoir. Moisture conditions are such now to bring winter wheat on in good shape. Some winter wheat spotted and some looks very well. With over 75% of the crop in, farmers are optimistic that with normal June rains, they should have better than an average crop. Grass conditions best in years. Pretty heavy losses with lambs during the week due to wet weather.

TOOLE: Heavy rains throughout county during entire week. Precipitation for May averages 4.0 inches to date. Rainfall for week at Shelby 2.35, at Gold Butte 2.75. About 80% of wheat seeded. No seeding during week, considerable mustard is still to be seeded. Wheat that has been seeded is coming along in excellent shape with sufficient moisture to keep it going for a considerable length of time. Heavy May rains have made lambing very difficult but losses have not been exceedingly great. Ranchers building fence report at least 2 feet of moisture throughout entire range. Range in excellent shape and some hot growing weather would add materially to the forage within the next week. Labor is sufficient.

VALLEY: Last Friday, Saturday and Monday, extremely high winds. Much cloudy, cool weather and general rain middle of this week. Precipitation varies from .25 to .75 inch. Crops growing slowly, but the few that were seeded early and not affected by winds are coming exceptionally good. Some fields show affects of cutworms. Very few sugar beets left to be seeded. Some blocking and thinning of started this week. Livestock for the most part look good. Lambing well along. Cutworms only insects reported to date.

WHEATLAND: Cool, cloudy first of week. Latter part, heavy rain and snow throughout county, improving already good moisture conditions. Field work slowed up because of added moisture. Crickets hatching in spots and grasshoppers appearing.

WIBAUX: Three-day rain .85 to 2.32 inches precipitation reported. Weather cool Growing conditions excellent, especially for grain. Grasshoppers hatching very slowly. Very large feed crop will be planted, particularly corn and millet. Large acreage of oats and barley will still be planted due to delay of wet weather. Ranges improving fast. Livestock in good condition.

YELLOWSTONE: 3.05 inches precipitation. General growing conditions very favorable with the ample moisture received. Warmer latter part of week. All beets planted and 90% up. Spring wheat in very good condition in dryland areas. Winter wheat as well as all other crops in excellent condition. Summer fallowing 75% completed. Crickets migrating and control work will start in full swing again Monday. Livestock in excellent condition. All springs, stock water reservoirs, etc. full of water. Range in good condition.



REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, May 31, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.  
Offices: Federal Office Building, Helena, Montana.

Growing conditions were ideal during the week ending May 31, with field crops, gardens, and ranges showing marked progress. In contrast with the cold weather and lack of sunshine during the preceding period, temperatures during the week just ended were mostly above normal with a relatively high percentage of sunshine. Rainfall for the week averaged considerably less than in the preceding week but was sufficient generally to keep topsoils moist. While the state average was but 0.56 inches heavier amounts ranging from 1.02 inches to 1.67 inches fell at such points as Havre, Great Falls and Bozeman. Slightly less than an inch was recorded at Malta and Missoula. Total precipitation from April 1 to May 31 for the 16 daily reporting stations averaged 3.60 inches compared with 1.16 inches during the comparable period last season.

While some delays due to wet soils were encountered in planting of such late crops as corn, potatoes, flax and beans, this work made generally good progress. Corn planting appears to be heavy in some eastern counties, Wibaux reporting the largest corn acreage on record for that county. A considerable increase in flax acreage is also indicated compared with the very small plantings in recent drouth years.

All grain crops made marked progress during the past week with winter wheat being the farthest advanced for this date in many years. In some western and south-central counties it is now in the boot with some fields heading out and is still jointing in most other areas. Except in localities where earlier soil-blowing damaged stands the crop is showing a heavy growth. Weeds have made headway in some localities. Early seeded spring wheat is growing fast. Later seedings are now above ground. Some spring wheat seeding continued last week in a few eastern and northern counties. Most of the oats and barley seedings are now in the ground. Winter sown rye is now headed out.

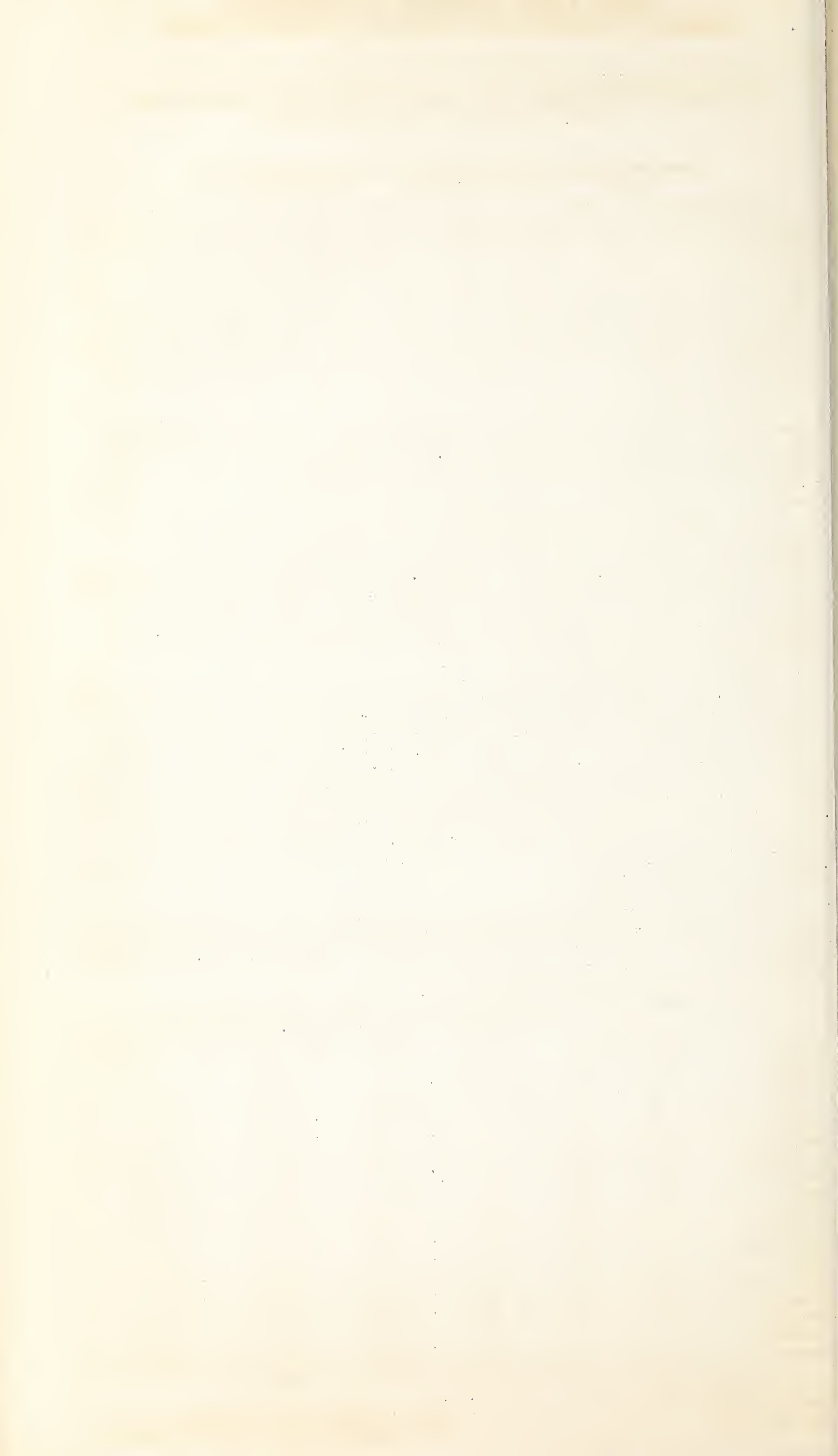
Thinning of sugar beets is well under way. The crop generally is reported making satisfactory progress with assurance of fair to good supplies of irrigation waters for later needs. All hay crops have responded to the May rainfall with good growth. Wild hay and tame hay meadows that have not been cut for hay in several years are now showing good promise of a hay crop. In some cases these fields will be irrigated by streams that have been dry for several seasons. Alfalfa hay has made a heavy growth generally with first cuttings expected earlier than last season. Grass growth has likewise been heavy and with reduced numbers of livestock on ranges, there have been many reports that there will be a heavy drop of seed from grasses now headed out. Livestock is reported in excellent condition generally, except in a few eastern localities where they wintered in poor shape. Shearing of sheep is getting under way. Streams recently have been running full, assuring ample water for livestock and irrigation needs.

While damage from Mormon crickets and grass-hoppers still hangs over the season's crop prospect as a constant threat, actual damage to date has been very small. Grasshoppers are now hatching out in large numbers in several areas and only a small proportion of the eggs in some cases are believed to be hatched. Mormon crickets, likewise increased in several counties.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING May 31, 1938

| Station     | Temperature |        | Sunshine<br>% of<br>Possible | This<br>Week | Total Precipitation       |                                     |
|-------------|-------------|--------|------------------------------|--------------|---------------------------|-------------------------------------|
|             | Highest     | Lowest |                              |              | From April<br>1st to date | For Corresponding<br>Period in 1937 |
| Billings    | 88          | 49     | *                            | T            | 4.59                      | 1.25                                |
| Bozeman     | 76          | 42     | *                            | 1.67         | 7.18                      | 3.24                                |
| Conrad      | *           | *      | *                            | 0.13         | 4.05                      | 0.76                                |
| Cut Bank    | 79          | 42     | *                            | 0.15         | 5.39                      | 1.10                                |
| Fort Peck   | 88          | 43     | *                            | 0.36         | 1.95                      | 0.74                                |
| Glendive    | 87          | 45     | *                            | 0.43         | 2.45                      | 0.60                                |
| Great Falls | 85          | 45     | *                            | 1.37         | 3.07                      | 0.49                                |
| Havre       | 90          | 44     | 54                           | 1.02         | 2.75                      | 0.82                                |
| HELENA      | 79          | 46     | 59                           | 0.21         | 4.26                      | 0.86                                |
| Kalispell   | 84          | 42     | 68                           | 0.59         | 2.09                      | 2.22                                |
| Lewistown   | 86          | 39     | *                            | 0.21         | 3.16                      | 0.99                                |
| Malta       | 89          | 43     | *                            | 0.95         | 3.27                      | 1.02                                |
| Miles City  | 88          | 50     | 78                           | 0.10         | 2.89                      | 1.60                                |
| Missoula    | 86          | 44     | 68                           | 0.93         | 3.48                      | 1.90                                |
| Poplar      | 88          | 40     | *                            | 0.63         | 2.23                      | 0.48                                |
| Stanford    | *           | *      | *                            | 0.27         | 4.80                      | 0.46                                |
| Average     |             |        |                              | 0.56         | 3.60                      | 1.16                                |

\* No Data.





are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Warmer with very little precipitation. Majority of seeding done. Excellent growing conditions. Lambing about through with fair to good lamb crop. Grasses made good gain past week. No grasshopper hatchings to date. Some crickets hatching.

BIG HORN: Good showers early in week, covered entire county making May rainfall above normal and growing conditions the best for years. Warmer weather prevailed during latter part of week. All grain doing well. Winter wheat in the boot. Beets and other cultivated crops making good progress. Beet thinning under way. Alfalfa and other hay in valley making abundant growth. Range best in years according to reports. Grass heading out 12 to 16 inches tall. Livestock in splendid shape.

BLAINE: Warm temperature with intermittent showers ranging from very light to heavy throughout county. Growing conditions excellent. All crops show excellent growth during past week. Some planting of late feed crops being done. Thinning of beets started this week. No insect pest damage as yet. Slight improvement in condition of livestock.

CARBON: Good rains reported Sunday in all portions of county, and in Bridger section on Thursday. Considerable windy weather. Practically all crops in. Bean planting well under way and planting of potatoes has also been done. All winter grain jointed. Spring grains making extra good growth. Many orchards have been sprayed. Creeks and streams rising, approaching high water stage. Mormon crickets on the move and altho they have made some inroads on spring grains, in general, they have not been destructive and are under control in communities where power dusters are used. Livestock in very good condition.

CASCADE: Cool, cloudy weather prevailed throughout most of week with two warm sunny days latter part of week making growing conditions ideal. Frequent local showers fore part of week, with heavy rain Friday night, added to the already abundant supply of moisture. Crop prospects continue to look excellent; cultivating and thinning of sugar beets started. Livestock in excellent condition with more range grass than has been available at any time the past five years. Surplus of labor. Crews have kept Mormon crickets under control and only in a few cases have grasshoppers been reported as having hatched.

CHOUTEAU: Rains past two weeks have speeded growing conditions. Winter wheat making rapid strides in all sections except where blowing occurred. Crops looking better than for three years previous. Spring wheat making growth but slowed somewhat by cool weather. Some late wheat seedings being made. Weeds making headway in many sections. Grass improving rapidly. Many ranchers in mountain areas are replenishing herds. Rain and wind have delayed cricket control work. Crickets are very scattered. Areas where they were thick last year have less while areas not infested last year have heavier infestations.

FOSTER - POWDER RIVER: Light rains and showers over entire area fore part of week with weather clear and warmer latter part. Growing conditions excellent. All crops making fine growth. Winter rye heading. Some wheat seeding yet. Conditions good for summer fallow. Alfalfa and other hay crops under regular and flood irrigation excellent. Sugar beets up and thinning started. Wild hay crop looks very promising where flooded. Rains past ten days have made range conditions best in several years. Early grasses have made good growth and now headed. Late varieties starting. Cattle and sheep gaining with calf and lamb crops well above average. No restocking reported yet. No apparent damage to crickets by recent wet weather.

DANIELS: Precipitation during fore part of week 0.60 inch. Growing conditions excellent. Warm weather interspersed with local showers and very little wind has caused rapid growth of all vegetation. Grain crops well advanced except where damaged by early spring winds. Some reseeding being done on damaged fields. Considerable effort has been put forth by farmers during past week in ridging strips of land adjacent to wheat fields for protection against wind erosion. Pasture grasses showing unusual growth in protected places. Pastures that have been seriously damaged by wind still show very little growth of grass. Livestock picking up and showing more bloom. Some damage to wheat fields by wireworms is reported.

DAWSON: Scattered showers prevailed over county fore part of week, with balance warm and good growing conditions. Week closed somewhat windy but practically no blowing. Most of earlier seeded crops coming to a height sufficient to shade the ground and stands generally quite satisfactory. Lambing fairly well completed, with rather high percentages prevailing. Grass conditions throughout entire area good and water holes filled. Shearing starting with clip apparently quite good. Grasshoppers appearing in considerable numbers in scattered parts of county, and to some extent quite generally. Cooler weather apparently has not injured them.

FALLON - CARTER: Local showers extended over most of both counties. Approximately

(Cont'd on Page 2.)



.59 inch precipitation. Growing conditions excellent. Crop conditions good. Large number of twins in lambing and high percent lamb crop reported. Weather conditions have in no way interfered with lambing operations. Excellent grass.

FERGUS: Rainfall .27 inches during week. Good growing weather with both winter and spring wheat making very good growth. Strip one and a half miles wide near Moore received some hail. Crop all in. Some early last fall seedings of winter wheat troubled with heavy growth of fan weed. Alfalfa making best growth in several years. Irrigation water available for first time in about four years in some streams. Most native hay meadows will produce at least a fair cutting this year. Cattle being moved into summer range. Lamb and calf crop doing exceptionally well. Grasshoppers hatching in practically all parts of county but there are only a few spots where they are thick enough for expected damage. Crickets in localities more numerous than last year. Crews working.

FLATHEAD: Days hot and sunshiny. Growing conditions excellent. All grain crops and forage crops doing well, except in some localities where weeds have become a menace to early planted spring crops. Damage not expected to be very heavy. Hot weather has caused a heavy runoff on Flathead watershed and the river and lake are near flood stage. Considerable flood damage will be caused if hot weather continues a few days. Conditions of ranges excellent, condition of all livestock is good.

GALLATIN: Mostly warm, clear weather, altho a few local showers occurred. Field work resumed southern end of county during latter part of week. All crops and particularly winter wheat and alfalfa have made remarkable growth since the heavy precipitation of a week ago. About 40% of spring seeding still to be done in southern portion of county. High water occurring in all streams and water has now been turned into all irrigation ditches. Grasshoppers hatching in damaging numbers in north and west portions of county. Dusting for crickets continues in north portion. Shearing of sheep under way.

GARFIELD - PETROLEUM: Warmer weather and additional precipitation in most areas improved general growing conditions which have been good. Corn and feed crop seeding continues after some delay because of weather. Generally conditions have been very favorable for crop growth and crops are making satisfactory progress. Lambing is nearing completion with reported lamb crops approaching 100%. Sheep conditions good. Cattle condition continues to improve generally with improvement in range. Excepting East Garfield County, range grasses making good recovery.

GLACIER: Spotted showers throughout county. Growing conditions good. Seeding still delayed in northern areas of county. Crops generally in excellent condition. Some early wheat commencing to stool. Best grass the county has seen for years. Livestock condition generally good. Sheep still coming in for summer range. Labor supply adequate.

HILL: Precipitation .89 with .79 of this on May 28. Good growing conditions throughout week with scattered showers. Some reports received of worm damage. Few reports of grasshoppers hatching. Grass making exceptionally good growth. Livestock in good condition. Labor situation unchanged.

JUDITH BASIN: Precipitation moderate. Temperatures moderate to high. Season advancing fast. Practically all wheat growing in excellent condition. Few indications of wireworm damage. Soil moisture good. Soil blowing reduced past week. Grasshoppers have not appeared yet in most areas. Crickets have begun to migrate and do damage in west end of county. Condition of livestock improving fast. Ranges best in ten years.

LAKE: Few scattered showers. Weather hot with some wind. Crops growing rapidly. Some fall grain starting to head. Sugar beet thinning started. Irrigation of alfalfa, pasture and grain crops in full swing. Shearing about completed. Sheep being moved to higher ranges. Surplus of labor. Crickets migrating. Two crews dusting. Grasshoppers being poisoned in Moiese district.

LEWIS & CLARK - BROADWATER: Some precipitation, fairly warm weather for good crop and grass growth. All crop conditions excellent. Irrigation water generally plentiful with most streams higher than for several seasons. Grass excellent over both counties. Stock water ample with springs running more water than normal and some beginning to flow that have been dormant during dry years. Small loss of stock thought due to poisonous weeds. Stock generally in very good condition. Present indications that Mormon cricket and grasshopper damage will be less than expected earlier.

MADISON - JEFFERSON: Excellent growing conditions. Warm, quiet days have really made the week seem like spring. Local showers occurred throughout week in various areas. Crops made more growth during week than during any previous week this season. Conditions much more favorable than a year ago at this time. Very little grain or other crops remain to be seeded throughout both counties.



Many farmers irrigating. Thinning of sugar beets started on Parrot Bench. Pasture conditions remain best in a number of years. Some cattle being moved to summer range and some sheep going to late spring ranges preparatory to going on Forest.

MEAGHER: Showers. Soil moisture excellent. Heavy runoff in southern part of county, due to storm over ten days ago. Smith River Reservoir rising. No freezing nights. Soil conditions, crop conditions and growing conditions now excellent. Growth of grass far ahead of last year. Light losses among lambs in many instances, and heavy loss of both lambs and ewes reported for one outfit as a result of last week's storm. Livestock now in excellent condition. Supply of labor still a little ahead of demand.

MISSOULA: Warm and bright most of week. Some good showers end of week. Excellent growing conditions. Sugar beet crop growing especially well. Cultivating, blocking and thinning in progress. Grain crops doing well, good stands common. Alfalfa improving due to warm weather. Irrigation in full progress in most localities. All streams are high providing plenty of irrigation water. Summer fallow starting in dry land areas. Pastures in excellent condition. Livestock improving. New labor being supplied for beet work.

PARK: Unsettled weather during week, but decidedly warmer. Severe wind Friday. Warmer weather after precipitation of previous week made for good growing conditions. Practically all seeding completed with exception of gardens, potatoes and peas. Summer fallowing in full swing. All streams highest in years and farmers are taking advantage of water by irrigating meadows and pastures. Livestock in good condition. Few wool clips sold at around 20¢. Several men in seeking jobs. Cricket dusting under way. Grasshopper hatch very slow.

PHILLIPS: Intermittent showers over county with warmer weather and ideal growing conditions. No wind damage. No frost since May 15. Hail storm in northern area but crops recovering. With exception of some corn and other feed crops all dryland spring seeding completed. Same situation in valley. With warmer weather crops making excellent growth. Cutworm damage reported in some localities. No grasshoppers to date. Livestock condition good. Range making excellent growth with evidence of reseeding having taken place. Lamb crop above normal, crop of calves normal. Surplus of labor.

PONDERA: Weather warmer bringing first favorable growing conditions since seeding of crops. Local showers with total precipitation of 0.46 inch at Conrad. Nearly all seeding is completed and most of crops are up. All stands are excellent and growth progressing rapidly. Thinning and hoeing is commencing in beet fields. Livestock in excellent condition. Lambs and calves making good growth with improved grazing conditions. Labor supply adequate. Grasshoppers are hatching, however, there appears to be no reason for alarm of a large infestation at present.

PRAIRIE: Scattered showers. Weather definitely warmer. Crops continue to improve and are making good growth. Considerable acreage of corn seeded since rain a week ago. Range grasses making splendid recovery. Livestock in good condition. Good lamb crops being reported.

RICHLAND: Slight precipitation fore part of week has made favorable conditions for beets and grain crops just coming thru the ground. General good growth weather has occurred throughout entire week. Grain crops showing up fine over entire county. Some grain has been blowing, but not to any great extent. Ranges continue to improve and look the best they have for a number of years. Cutworms appearing in quite large numbers which will probably hinder corn crops to a large extent and probably reduce to some extent the acreage that will be planted. Grasshoppers starting to hatch on more sandy soils in irrigated valley. Expected to start mixing stations next week, using WPA labor, with stations located at Sidney and Savage so as to have prepared bait on hand as soon as poisoning work will start.

ROOSEVELT: Generally clear and warm with showers over most of county middle of week. Growing conditions excellent with grain crops making good growth where not damaged by wireworms. Most of corn planted with seeding of feed crops as millet and cane under way. Improved moisture conditions encouraging seeding of larger acreages of feed crops, and some flax. Some summer fallowing being done. Ranges showing good growth in eastern section of county. Growth slower in western section, showing apparently more damage from previous drouth. Grasshoppers hatching in small numbers. Not sufficient to require poisoning as yet. Small amount of cutworm damage. Considerable damage from wire worms in north-central part of county. Damage varies from negligible amount to 75% in some scattered fields in this section.

ROSEBUD: Few local showers during week. All crops and range grasses making rapid growth. Growing conditions ideal. Winter wheat making rapid recovery following last week's moisture. Corn only partially seeded before rain. Fields generally too wet for planting until last of week. Thinning of early planted beets started during week. Some fields coming up rather uneven. Livestock and range conditions best in several years. Range grasses coming back rapidly.



SANTERS: No precipitation. Higher temperatures and windy weather rapidly depleting soil moisture. Crops making good growth but dry land crops beginning to show need of moisture. Some winter wheat and alfalfa starting to burn. All spring seeding of grain and meadow crops showing good stand but needing rain. Irrigation in full swing. Livestock making good gains. Range grasses heading out at short stage on account of cold backward weather. Range grasses starting to dry from lack of moisture. Dusting for crickets continues with large crew over wide areas. All streams rising rapidly. Clarks Fork River reaching peak flow but no serious flood condition.

SHERIDAN: Local showers during week total about .50 inch precipitation. Growing conditions excellent. Crops have been developing in satisfactory manner. Wireworms and cutworms doing considerable damage in various parts of county. Livestock condition remains unchanged. Pastures appear to be developing sufficiently to carry livestock on farms in the county. No change in labor situation.

STILLWATER: Higher temperatures prevailed. .20 precipitation on Monday. In general weather has been favorable for crop growth with exception of Saturday which was windy. All crops making good growth. Soil moisture tests taken few miles north of Columbus indicate moisture is present to depth of 2 feet in sod and up to 3 feet in summer fallow. In Molt area soil moisture tests show moisture to a depth of 42 to 48 inches in summer fallow and winter wheat put in on summer-fall w. Thinning started in sugar beet fields. All livestock in good condition. Surplus of labor.

SWEETGRASS: Cool and cloudy half of week, balance warm. Precipitation .25 inch. General growing conditions past three days excellent. All crops advancing rapidly. All seeding of crops about complete. Spring crops coming with good stands. Earlier crops where spotted now coming and growing rapidly. Cattle in excellent shape, mustering the storm. Considerable loss in young lambs on ranges in last week's storm. No change in labor situation. Crickets growing rapidly and still hatching. Little evidence of grasshoppers.

TETON: Ideal growing conditions. Precipitation .48 at Choteau, heavier in southeastern half of county. Crop conditions best in many years. Wireworms have caused some damage to spring wheat in Farmington area and some cutworm damage has been reported in various parts of county. No grasshopper hatching reported as yet. Grass conditions best in many years all over the range. Considerable acreage of flax going into the ground this year. Livestock in good condition.

TOOLE: Precipitation received in most parts of county earlier part of week. Good hot growing weather past three days. Moisture conditions excellent. Gold Butte reports 5.20 inches up to May 23, additional showers received since that time. In Shelby the precipitation has been very close to 4 inches. Wheat coming along very nicely, good even stands throughout entire county. Some wheat seeded this week and it is expected that the bulk will be in before the end of next week. Mustard seedings in full swing. Grass coming along in excellent shape. Residents claim it is the best start for past ten years.

VALLEY: Fore part of week characterized by moderate winds and cloudy weather with local showers. Latter part calm with local showers making growing conditions somewhat better. Early seedings of crops looking very good in most localities. Later seedings coming fair, particularly where no wind damage was done. Alfalfa looking good. Sugar beet blocking and thinning just started. Some flax being seeded. Some fields show damage by cutworms. Few reports of wireworms showing up. No reports of grasshoppers as yet. Range good in comparison to past two or three years. Lambing practically finished.

WHEATLAND: Several scattered showers during week over entire county. Excellent moisture conditions. Crops have good start. Grass in good shape. Some livestock losses as a result of storm. In most cases loss was small.

WIBAUX: Precipitation in north end of county 0.46 inch, at Wibaux 0.30 inch, lighter south. Moisture conditions very good and growing conditions excellent. Grain seeding pretty well completed. Corn planting in full swing. Largest corn crop in history of county will be planted. Some grass seeding being done. Grasshoppers hatching in large numbers in parts of county. Ranges improving fast. Lambing reports are above normal crop.

YELLOWSTONE: Precipitation 0.55 inch. "eather warmer and growing conditions excellent. Crops excellent with moisture received past two weeks. Some planting of corn still under way. All irrigated crops looking good. Crickets migrating into crop lands very heavily. Under control to date. Livestock in good condition. Range grass and water plentiful. Surplus of labor.

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